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Induction Coupling for Braking Roller Drive on the Lay-flat Equipment

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**Claims**

1. Lay-flat equipment (1) for films or tubular films (6) extruded by blown film extrusion installations (1),

- said installation (1) comprising at least one roller (16),
- which (16) guides the walls of the film or of the tubular film (16) [sic: 6]
- wherein the lay-flat equipment (1) comprises at least one device (B, 24, 22, 23, 21, 20, 25, 26) for influencing the rotational speed of the roller (16),
- said device (B, 24, 22, 23, 21, 20, 25, 26) comprising means (9) for providing a torque (B, 24).
- which (B, 24) can be transferred onto the roller (16) by means of transfer devices (22, 23, 21, 20),

**characterized in**

transfer devices (22, 23, 21, 20), which allow a slip between the roller (16) and the devices (24) for providing a torque.

2. Lay-flat equipment (1) according to claim 1

**characterized in that**

the transfer devices (22, 23, 21, 20) comprise a coupling (25), using which the roller (16) and the means (24) for providing a torque can be separated.

3. Lay-flat equipment (1) according to any of the preceding claims

**characterized in that**

the transfer devices (20-23) comprise a location (21), at which the torque is transferred using a force-fit connection.

4. Lay-flat equipment (1) according to the preceding claim

**characterized in that**

the force-fit connection comprises at least one of the following characteristics:

- a hydraulic coupling
- a friction coupling.

5. Lay-flat equipment (1) according to any of the claims 2 to 4

**characterized in that**

the force-fit connection contains at least one magnet (34, 35).

6. Lay-flat equipment (1) according to any of the claims 2 to 5

**characterized in that**

- first force flow surfaces (37) are assigned to the roller (16) and second force flow surfaces (36) are assigned to the means for providing a torque (B, 24),
- said force flow surfaces (36, 37) being turned towards one another and
- which (36, 37) define the force-fit connection (27),
- wherein the surface of the opposite overlap of the first and second force flow surfaces (36, 37) defines the amount of the maximum torque transmission and
- wherein the surface of the opposite overlap of the first and second force flow surfaces (36, 37) can be changed by a relative movement of the first and second force flow surfaces (36, 37).

7. Lay-flat equipment (1) according to any of the preceding claims

**characterized in that**

several transfer devices (20-23) are provided.

8. Lay-flat equipment (1) according to claim 7, referred back to claim 6

**characterized in that**

the surface of the opposite overlap of the first and the second force flow surfaces (36, 37) of the transfer devices of several rollers (16) can be changed by a common relative movement of the first and second force flow surfaces (36, 37) of these rollers (16).

9. Lay-flat equipment (1) according to any of the preceding claims

**characterized in that** a transfer device (20-23) transfers torque to several rollers (16).

10. Lay-flat equipment (1) according to any of the claims 5 to 9

**characterized in**

- a force-fit connection (27), which contains at least one electromagnet (35),
- which (35) is connected to a power controller (32) using which the current intensity in the coils of the electromagnet (35) and thus the field intensity generated by the electromagnet (35) can be changed.